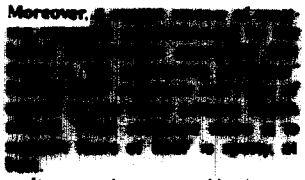
JONATHAN ADLER

Telephoning faulty fears

When David Reynard's wife was diagnosed with brain cancer, Mr. Reynard began searching for a cause. Convinced that his wife's tumor was not merely a statistic — more than 15,000 new cases of brain cancer were reported in 1992 — Mr. Reynard found a "cause" in the cellular phone his wife had been using for several months before the tumor was discovered. Now, Mr. Reynard is suing the manufacturer, the carrier and the retail store where the phone was bought, claiming that their product is responsible for his wife's death.

Mr. Reynard's interest in cellular phones reportedly was piqued by a newspaper story about the alleged health effects of electromagnetic radiation (more on that later). It was then that he noticed that his wife's tumor was located behind her left ear. As he told Larry King, "It appeared that [the tumor] was in the location directly next to the antenna. And"



Moreover,

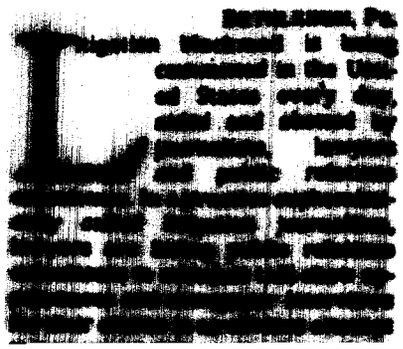
It is true that reported brain cancer rates have increased in the past several years. However, they have done so primarily among those over 65, who are at greatest risk from all forms of cancer to begin with, and are unlikely to be active users of hand-held cellular phones. Moreover, improved diagnostic techniques and increased attention to the elderly are likely responsible for much of the apparent increase.

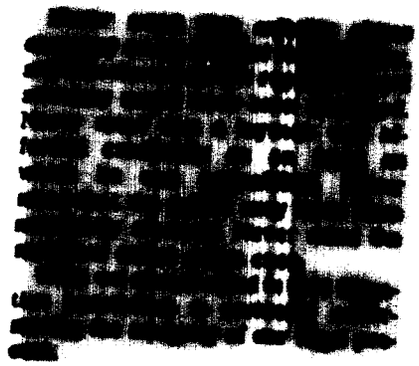
Despite gaping holes in his theory, Mr. Reynard's claim has received wide media coverage. His appearance on "Larry King Live" Jan. 21 set off a slight tremor in the cellular phone industry's stocks. Since

Cellular phones may indeed cause health risks, but not the kind Mr. Reynard believes. It is more likely that the danger posed by cellular phones is their use in automobiles by careless or inattentive drivers, resulting in a marginal increase in highway injuries and fatalities. Such a risk has never been quantified, but it too is likely to be small. Moreover, it is important to consider all the benefits of cellular phones. Not only have they expanded communication, but they have enabled people to keep in touch

Litigation Journalism Is a Scourge

By Carole Gorney





First, the role of the courts is being pre-empted and their procedures un-

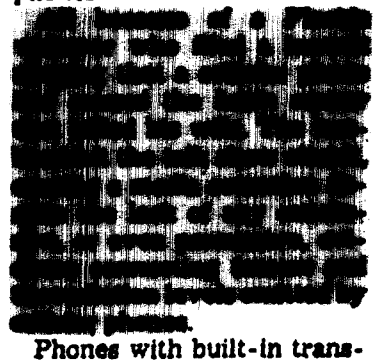
Those who cite the "people's right to know" argument should consider that the people have a right to know the truth. In litigation journalism, the facts are often never presented.

Even more insidious is the chilling

CONSUMER WATCH

Cellular Hysteria

Suddenly about 10 million American users found themselves wondering if the devices were health hazards. Worried investors sold off stock in companies that make the phones.



Phones with built-in transmitters emit high-frequency radio waves; at present, such electromagnetic waves are not known to harm living cells. Even so, the National Cancer Institute now is saying it will review U.S. brain cancer cases to determine whether there is any link to cellular phone use.

On Tuesday the Food and Drug Administration said that it will soon issue its first advisory on cellular phones, one that will caution consumers against excessive use of the phones and unnecessary exposure to their antennas. It recommends using models with antennas positioned outside the car instead of the portable or pocket-size versions that have become so popular.

A number of common electric gadgets have been linked to diseases in a series of recent scares. But in none of these cases was there such intense reaction; clearly, the cellular phone scare is not a result of the evidence.

THE LOS ANGELES TIMES
February 4, 1993

This past week, the stock of several telecommunications companies took a beating after allegations were made in a lawsuit that a woman's cancer had been caused by a mobile phone.

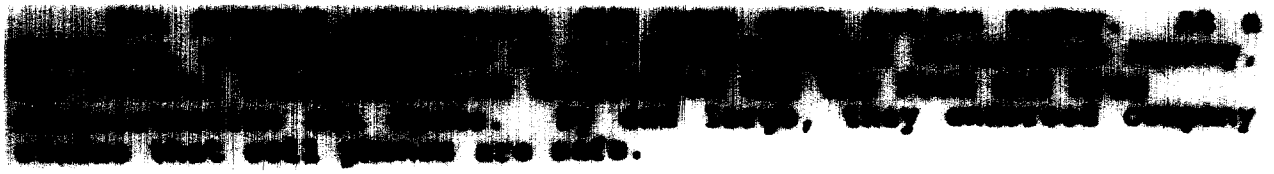
Paula Rissel of member station KPLU reports.

PAULA RISSEL: It was a TV talk show that launched much of the recent debate concerning the health hazards of cellular phones. On "CNN Live with Larry King," a Florida man alleged his wife's death from brain cancer was caused by the radio waves emitted from her cell phone. He filed a lawsuit which names the phone's manufacturer, the company that provided the service, and the store that sold him the device. The show prompted a barrage of media coverage, even though there is no scientific evidence to substantiate the charges.

Mike Holten, of the Cellular Telecommunications Industry Association, says even so, the association will immediately spend more than a million dollars to review the existing research on the health effects of radio-wave emissions.

MIKE HOLTEN [Cellular Telecommunications Industry Assoc.]: We're funding research to revalidate the findings of existing studies which have found that the radio waves from the cellular phones are safe.

RISSEL: They also asked the federal government to review the results to give it more credibility.



But even the suggestion that there might be a problem was enough to cause trouble for the industry. Rhonda Wickham is the editor of Cellular Business magazine.

RHONDA WICKHAM [Cellular Business Magazine]: You hear in the back of your mind about cellular phones, so if you're going to buy one, you say, "Well, maybe I'll put if off until that all settles down 'cause I don't want to mess with that."

RISSEL: Investment analysts are praising the quick and some say pro-active response of the cellular industry to the crisis.

Al Merman, with Gruntel & Company in New York, says it compares positively to what he considers the negative response of the tobacco industry when studies first began linking cancer to smoking.

AL MERMAN [Gruntel & Company]: And if you look at the very inception, the tobacco industry formed the Tobacco Institute to show that tobacco smoking was not harmful. And it's been a constant battle with them. They're trying to negate the news. The cellular providers say, "Hey, wait a second. We want to protect the public. Let's do everything possible to find out if there is any cause of effect, and number two, if there is a cause of effect, let's see what we could do to mitigate against it."

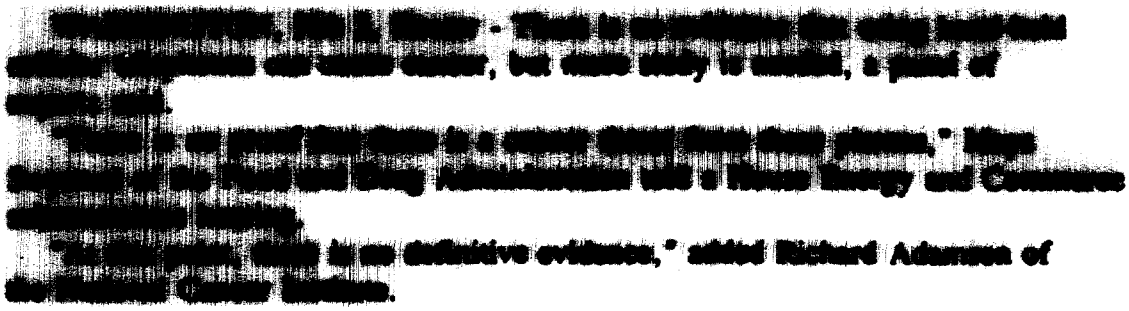
RISSEL: Merman says, in the long run, the industry which, prior to the scare was gaining 7600 customers a day, will continue to thrive.

Cellular Business editor Rhonda Wickham says the mobile phones have become such a part of people's lives that they are likely to decide the benefits outweigh the risks.

WICKHAM: It's just going to take a little while for people to put it all back in perspective, that this is not something that's proven, and then to put that on a balance with, "Okay, I used my cellular phone to call in an emergency 911 last week and it saved this person's life, or it helped me make this meeting," and will put in on the scale for productivity and everything and realize, "Okay, these are only claims over here, and this is what the cellular phone actually does for me."

RISSEL: Last year the cellular industry grew by 40 percent. One analyst says, even if that rate slows to 35 percent, the industry will still be in excellent shape.

For National Public Radio, I'm Paula Rissel in Seattle.



But they said there had only been a few studies of the effects of exposure to radio frequency on humans.

Concern about the risks of hand-held cellular telephones arose after a Florida man filed a law suit alleging that his wife died of brain cancer because she used cellular phones.

REUTER
February 2, 1993

[redacted]

[redacted]

ABC Radio

PAUL HARVEY NEWS
February 2, 1993

SAFETY UPDATE

FAST FACTS

Portable Cellular Telephone Safety

CTIA Cellular Telecommunications Industry Association
1133 21st Street, NW
Third Floor
Washington, DC 20036
202-785-0081 Telephone
202-785-0721 Fax

Building The Wireless Future.

- Cellular telephones fall well within safety standards adopted by the Federal Communications Commission. SEE BACKGROUNDER

- Scientists and government regulators have found no evidence that portable cellular phones cause health problems. SEE BACKGROUNDER

- The allegation that cellular phones cause cancer has been made by product liability lawyers seeking cash damages. They have presented no scientific evidence to back their assertions. SEE QUESTIONS & ANSWERS

- Cellular telephones transmit on radio waves which are similar to, but many times weaker than, television signals. SEE FACT SHEET

- Portable cellular phones use extremely low amounts of energy -- a maximum of 0.6 watts, or about 1/10 the energy of a dim light bulb. SEE FACT SHEET

- Portable cellular phones operate at full power only 5 percent of the time. SEE ANSI & IEEE STANDARDS

Rest assured.
Cellular telephones are safe!

For more detailed information, please turn the page.

SAFETY UPDATE

BACKGROUNDER
Portable Cellular Telephone Safety

C T I A Cellular Telecommunications Industry Association
1133 21st Street, NW
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Building The Wireless Future

A great deal of research has been conducted on the biological effects of exposure to radio frequency (RF) waves, such as those used in cellular communications. The research has found no evidence that the radio waves emitted by cellular telephones pose a health risk. All cellular telephones fall well within safety standards adopted by the Federal Communications Commission and other government and private agencies.

How Cellular Works

Cellular technology uses very low-power radio waves to transmit and receive telephone calls. Cellular radio waves transmit voice communications in the ultra-high frequency (UHF) band, similar to the waves used for television channel 13 and higher.

The cellular system works by dividing a city or region into small geographic areas called cells, each served by its own low-power radio transmitter and receiver. Once a cellular call or data message reaches a transmitter/receiver tower, it is plugged into the regular land-line phone system. Each cell is so small that the amount of power required by cellular telephones to communicate with nearby transmitter/receiver towers is very low.

Each cellular transmission tower has multiple channels to provide service to many callers at once. As a caller moves across town, the signal from his or her cellular telephone is automatically passed from one cell to the next, without interruption.

Electromagnetic Fields and Power Levels

Electromagnetic fields (EMFs) are produced all around us -- not only by man-made sources like electricity and radio signals, but by natural sources as well, including the sun, the earth and even the cells within our own bodies. These fields consist of electromagnetic energy which radiates in waves like the ripples which form when a small rock is thrown into a pond. ("Radiation" describes the passage of energy through space.)

The electromagnetic spectrum ranges from radiation of extremely low frequencies and long wavelengths, such as the radiation emitted by power lines, to radiation of high frequency and short wavelengths, such as X-rays and gamma rays. (See accompanying illustration.) In

between is the radiation produced by radio and television waves, microwaves, radar, etc. Some studies have raised the possibility that extremely low frequency (ELF) radiation, such as from power lines, may cause health problems among people living in its immediate vicinity. But, the human body absorbs little or none of the EMF associated with cellular UHF frequencies, and that is why research has never shown any harmful effects of cellular phones on users.

There are two kinds of electromagnetic radiation -- ionizing and non-ionizing. Radiation with frequencies above those of light are called "ionizing radiation," because their frequencies are powerful enough to damage tissue. Radiation with frequencies below visible light are called "non-ionizing radiation" because they are too weak to harm cells. Cellular telephones operate within the non-ionizing portion of the spectrum.

The power level of an electromagnetic field and its frequency are the important factors in determining any effect on the human body. Microwave ovens, for example, produce power at high enough levels to heat water molecules. That is how they cook food. Portable cellular phones, on the other hand, operate at a maximum of only 0.6 watts of power, equal to about one-tenth the power of a dim light bulb. Most of the time, portable cellular telephones operate at even lower levels of power, because they are built to automatically "step down" to the lowest power necessary to communicate with cellular towers. In a typical urban market, cellular phones operate at full power only 5 percent of the time.

Safety Standards

The Federal Communications Commission (FCC) has adopted safety standards set in 1982 by the American National Standards Institute (ANSI). Cellular phones operate many times below the safe power levels of these standards.

In 1992, ANSI adopted more stringent safety standards set by the Institute of Electrical and Electronics Engineers (IEEE). The FCC is currently considering adopting the new ANSI/IEEE standard. Portable cellular phones, operating at a maximum of only 0.6 watts of power, still fall well within even the new, more stringent ANSI/IEEE standards.

Four other government and private organizations have also found no evidence that cellular phones cause health effects. These agencies are: the National Institute of Occupational Safety and Health, the Food and Drug Administration, the National Council on Radiation Protection and Measurements, and the International Radiation Protection Association. The FDA concluded, "There is no proof at this point that cellular phones are harmful." The IEEE found, "Under conditions of normal use, the general conclusion is that cellular telephones are considered safe for the users and the public."

Past and Future Research

More than 6,000 papers have been published on experiments which exposed animals or cells to radio frequencies. Dr. Kristian Storm, chairman of Surgical Oncology at the University of Wisconsin Medical School, has evaluated this research and concludes: "Electromagnetic fields at the cellular phone operating frequency band and power level have been proven incapable of causing DNA, gene, or chromosome mutations that could lead to cancer."

Nevertheless, the Cellular Telecommunications Industry Association (CTIA), representing cellular carriers and manufacturers, has asked the federal government to appoint a blue-ribbon commission to oversee additional research, which the industry will fund. CTIA's decision to fund additional research represents an effort to resolve any concerns the public may have about the safety of cellular phones.

SAFETY UPDATE

C T I A Cellular Telecommunications Industry Association
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Building The Wireless Future™

ANSI AND IEEE STANDARDS
Portable Cellular Phones Operate Well Within the Limits

Portable cellular telephones operate within guidelines set by the American National Standards Institute (ANSI). These standards have been adopted by the Federal Communications Commission (FCC). ANSI first issued standards in 1982. They said devices operating at cellular telephone frequencies and at less than 7 watts of power are considered safe.

Even though these standards included a 10-fold safety factor, last year ANSI adopted new safety standards set by the Institute of Electrical and Electronics Engineers (IEEE). The FCC is expected to adopt the more stringent ANSI/IEEE standards shortly.

At a maximum of 0.6 watts of power, hand-held, portable cellular telephones still fall well within the new limits. It's important to recognize that portable cellular phones operate at 0.6 watts only a small portion of the time. The phones are designed to use the minimum power necessary to reach a receiving/transmission station. In a typical urban market, cellular phones operate at full power only about 5 percent of the time. The rest of the time they operate at a power level of less than half the maximum 0.6 watts.

SAFETY UPDATE

QUESTIONS AND ANSWERS

Portable Cellular Telephone Safety

CTIA Cellular Telecommunications Industry Association
1133 21st Street, NW
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Washington, DC 20036
202-785-0081 Telephone
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Building The Wireless Future.

1. Is it true that cellular telephones cause cancer?

   There is no evidence, involving either human beings or research animals, which links cellular telephone use with cancer, or any other health effects.

   > There have been approximately 10,000 studies over the past 40 years on electromagnetic fields. In the past two years alone, 733 studies and research papers on electromagnetic fields have been published. Not one of these thousands of studies has found evidence that cellular phones are harmful to your health. The overwhelming consensus of scientists is that cellular phones are safe.

2. Then why have I been hearing so much about it?

   Because product liability lawyers have sought to gain publicity for a law suit in Florida.

   > The lawyers represent a man who claims his wife's fatal brain tumor was caused by using a portable cellular telephone. These lawyers have produced no scientific evidence to support the claim.

3. How can you explain the fact that this woman died of a tumor which was located close to the antenna of her cellular phone?

   With over 4 million Americans using portable cellular telephones, the laws of random chance dictate that some will develop brain cancer, not connected in any way to their phone use.

   > The American Cancer Society estimates that about 17,500 cases of brain cancer are diagnosed each year. Therefore, in any random group of 4 million Americans (the approximate number using hand-held portable cellular phones), we should expect to see about 280 cases of brain cancer diagnosed annually. Citing similar statistics, editors of the Mayo Clinic Health Letter advised readers to "keep your perspective on cellular phones....There's no proof that microwave radiation from cellular phones carries a health risk."

4. Hasn't there been an increase in brain cancers?

A slight rise in brain cancers over the past few decades has been noted, but that rise has occurred mainly in people over 65 and is generally attributed to better diagnostic techniques. Brain cancer among younger people -- those likely to use cellular phones -- is actually decreasing.

5. Do cellular phones generate electromagnetic fields? Aren't electromagnetic fields dangerous?

All electrical devices, from TVs to toasters to hairdryers, from computers to power tools to electric blankets, generate electromagnetic fields. There is no evidence that the type of electromagnetic field generated by cellular phones has any adverse health consequences.

Electromagnetic fields permeate daily life. The electromagnetic spectrum (see accompanying illustration) ranges from very low frequency radiation produced by electric-power lines to gamma rays produced in outer space. Among the intermediate frequencies are those of visible light and radio waves. Cellular phones operate in the radio wave portion of the electromagnetic spectrum, specifically between 800-900 megahertz. The radio waves that carry cellular conversations are in the same band as -- and no more threatening than -- the TV signals that surround your home.

Electromagnetic waves with frequencies above those of visible light are called "ionizing radiation," because these waves are powerful enough to dislodge electrons and other atomic particles in cells. Electromagnetic waves with frequencies below visible light are called "non-ionizing radiation" because they are too weak to harm cells. Cellular telephones operate within the non-ionizing portion of the spectrum.

6. But isn't there concern today that even non-ionizing energy can be harmful?

Some studies have raised the possibility that non-ionizing radiation such as the extremely low frequency (ELF) fields produced around high-voltage power lines household wiring might have negative health consequences under some circumstances. However, despite extensive research, no adverse health effects have ever been established for the low-power, ultra-high frequency radio waves used in cellular communications.

Unfortunately, concern about harmful effects of ELF fields from power lines has triggered unjustified concerns about ultra-high frequency (UHF) radio fields. The electromagnetic fields of different frequencies and power levels interact with the body in different ways. The body absorbs little or none of the electromagnetic energy associated with TV and cellular frequencies, in contrast to so-called "resonant" frequencies associated with power lines.

7. Don't cellular phones operate on microwave frequencies? Microwaves can be harmful, can't they?

Microwave ovens and cellular telephones occupy frequencies which are "neighbors" on the electromagnetic spectrum, but it is the energy or power of microwave ovens, not their frequency, that affect human tissue.

Biologists have long known that microwave radiation at very high power can cause heat. That is, in fact, how microwave ovens cook food. But cellular phones are far too weak to heat tissue. The maximum power in cellular phones is equal to about one-tenth the wattage of a dim light bulb.

The ability of cellular phone signals to travel several miles to a receiver tower is based on the sensitivity of the receiver, not the power of the phone. Portable cellular phones transmit at a maximum of only 0.6 watts of power. By comparison, CB radios and police walkie-talkies operate at a maximum of 5 watts.

Most of the time, portable cellular phones actually operate at power levels far below 0.6 watts, because they are built to automatically "step down" to the lowest level of power necessary to communicate with towers. In a typical urban market, cellular phones operate at full power only 5 percent of the time.

8. Isn't the location of a portable cellular phone antenna, a few inches from the head, dangerous?

No. Cellular phones operate at low power to start with, and the power drops dramatically with distance, even a distance of a few inches or centimeters.

9. Can you cite any studies establishing the safety of cellular phones?

More than 6,000 papers have been published reporting on experiments which exposed animals or cells to radio frequencies. Dr. Kristian Storm, chairman of Surgical Oncology at the University of Wisconsin Medical School, draws this conclusion from all the research: "Electromagnetic fields at the cellular phone operating frequency band and power level has been proven incapable of causing DNA, gene, or chromosome mutations that could lead to cancer."

10. Didn't one experiment find that cancer cells grew faster when exposed to radio waves?

An experiment conducted by Dr. Stephen Cleary found that radio waves seemed to increase the growth rate of cells in a test tube. But the experiment did not use the same radio frequencies employed by cellular phones. More importantly, most scientists are skeptical about extrapolating results from cells in a test tube to tissue in the human body. Dr. Cleary himself has stated he doesn't believe cellular phones cause cancer.

The FCC adopted standards developed by the American National Standards Institute (ANSI). When the ANSI standards were first issued in 1982, they said devices operating in the cellular telephone frequency range and at less than 7 watts were considered safe. Operating at a maximum of only 0.6 watts, the power output of portable cellular phones is 11 times below the standard endorsed by the FCC.

In order to increase the already-large safety margin, the FCC recently proposed revising its standards to reflect more stringent standards adopted last year by ANSI and the Institute of Electrical and Electronics Engineers (IEEE). Portable cellular phones still operate 15 percent below this new standard, even at maximum power.

It's important to know that portable cellular phones operate at 0.6 watts only about 5 percent of the time in a typical urban market. The rest of the time they operate at power levels as low as .006 watts, because they are designed to generate only the minimum power necessary to communicate with a cellular tower.

13. Have any other organizations investigated the safety of cellular phones?

Four other government and scientific agencies have also studied the matter of radio frequency exposure and found no evidence that cellular phones cause health effects.

These agencies are: the National Institute of Occupational Safety and Health, the Food and Drug Administration, the National Council on Radiation Protection and Measurements, and the International Radiation Protection Association.

The FDA assessed the research to date and concluded, "There is no proof at this point that cellular phones are harmful." The IEEE found, "Under conditions of normal use, the general conclusion is that cellular telephones are considered safe for the users and the public."

14. Why do cellular phones come with warnings if they are not dangerous?

Like all electrical devices, cellular phones come with instructions to assure their safe and effective use. Users could be exposed to a slight risk of an accidental mild burn, for instance, if the antenna is damaged or improperly used. Used correctly, cellular telephones pose no risk to health.

15. Is the cellular telephone industry doing anything about health concerns?

While existing research has established no connection between cellular phones and adverse health effects, the industry understands that the public is concerned and confused by the scare. Therefore, the Cellular Telecommunications Industry Association (CTIA) will fund additional research. CTIA has asked the Food and Drug Administration to review and validate this new research to ensure its credibility.

16. Does this mean the industry believes there might be problems with cellular?

No. The previous research has been extensive and the conclusions overwhelming. We expect the new research to reach the same conclusion, that cellular phones are safe. CTIA's decision to fund additional research represents a determination to reassure consumers.

SAFETY UPDATE

FACT SHEET

Portable Cellular Telephone Safety

C T I A Cellular Telecommunications Industry Association
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Building The Wireless Future

How Cellular Works

- Cellular technology uses very low-power radio waves to transmit and receive telephone

Safety Standards

- The Federal Communications Commission has adopted standards for cellular phones and other devices which operate in a similar frequency range. Cellular phones fall well within the safety range.

- Among other organizations which have found no health effects from cellular phones are the Food and Drug Administration, the National Institute of Occupational Safety and Health, the National Council on Radiation Protection and Measurements, the International Radiation Protection Association, and the Institute of Electrical and Electronics Engineers. The IEEE found that "under conditions of normal use, the general conclusion is that cellular telephones are considered safe for the users and the public."

Past and Future Research

- More than 6,000 papers have been published on the exposure of animals or cells to radio frequencies. This research has been summarized by Dr. Kristian Storm of the University of Wisconsin Medical School: "Electromagnetic fields at the cellular phone operating frequency band and power level have been proven incapable of causing DNA, gene, or chromosome mutations that could lead to cancer."

- Because of concerns expressed about the safety of cellular phones, CTIA has asked the federal government to oversee additional research, which will be funded by the industry.

- The cellular telephone industry is confident that future research will confirm the research to date, which has found no adverse health effects from cellular telephones.

- In the meantime, it is important to remember that cellular telephones *enhance* the safety of their users every day. Indeed, a majority of cellular phone owners report that the primary reason they purchased their cellular phone was to provide the kind of safety and security that comes with the ability to communicate in emergencies no matter where they are.

SAFETY UPDATE QUOTES

Portable Cellular Telephone Safety

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Telecommunications
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Building The

"Medical authorities note that not only is there no scientific evidence linking the phones to cancer but that brain tumors usually take a decade or longer to develop, not months.

* * *

"It was not science's finest hour, said James Enstrom, an epidemiologist at the University of California, Los Angeles. 'It's really bad when you get down to this, a crisis based on the anecdote of a single individual.'"

"From One Big Scare to Another: As 'Technophobia' Grows, Is Science the Loser?"
by Michael Fumento
Investor's Business Daily, February 23, 1993

"While Mr. [David] Reynard may be convinced that the cellular phone he purchased for his wife was responsible for her death, the scientific community is hardly convinced. Experts point out that the typical induction period for cancer is 20 or more years, not the few months during which Mrs. Reynard used her cellular phone. Dr. Eleanor Adair, a scientist at Yale University's John B. Pierce Foundation Laboratories, has long studied the potential effects of microwave fields. She flatly declared that cellular phones 'can't do that kind of damage to tissue,' while appearing on 'Larry King Live' with Mr. Reynard. Other scientists have expressed agreement.

* * *

"...Moreover, a recent review of existing research commissioned by the Labor Department concluded that there is 'no convincing evidence' linking EMF exposure and risks of cancer or any other adverse health effects. What evidence there is to support fears of EMF is spotty, at best."

"Telephoning faulty fears"
by Jonathan Adler
The Washington Times, February 20, 1993

"Most recently, a Florida widower, claiming his wife died from a brain tumor caused by her cellular telephone, argued his case on CNN's 'Larry King Live.'

"First, the role of the courts is being pre-empted and their procedures undermined as more cases are tried in the public arena long before official hearings take place. The arguments are mostly one-sided, devoid of cross-examination, evidence or witnesses.

"Second, while in the court of law a defendant can take the Fifth Amendment or decline to testify without prejudicing the case. In the court of the mass media, the defendant is expected to respond to questions and allegations. Failure to respond -- resorting to 'no comment' -- is viewed as an admission of guilt."

"Litigation Journalism Is a Scourge"
by Carole Gorney
The New York Times, February 15, 1993

"The low- and high-frequency controversies have one thing in common: in each case the electromagnetic waves or fields are too weak to affect human tissues by any well-understood mechanism. They are not known to disrupt living cells or alter DNA the way X-rays and ultraviolet radiation do. If these fields do indeed cause cancer, it is by a mechanism yet to be uncovered."

"Dialing 'P' for Panic: Can cellular phones cause brain cancer? There's scant evidence but lots of fear"
by Philip Elmer-Dewitt
Time Magazine, February 8, 1993

"The public should be aware that government guidelines, based on extensive research, provide a substantial margin of safety and comfort for the use of cellular telephones."

National Consumers League
Statement regarding the public concern about the use of cellular telephones
February 5, 1993

"...there is no proof at this point that cellular phones are harmful...It is not necessary that people stop using their hand-held cellular phones."

Food and Drug Administration
Talk Paper
February 4, 1993

Wertheimer: "Today in Washington, DC a panel made up of health experts and government regulatory officials told Congress there is no need to panic over the alleged connection between cellular phones and cancer."

* * *

Rissel: "...Cellular Business editor Rhonda Wickham says the mobile phones have become such a part of people's lives that they are likely to decide the benefits outweigh the risks."

Wickham: "It's just going to take a little while for people to put it all back in perspective, that this is not something that's proven, and then to put that on a balance with, 'Okay, I used my cellular phone to call in an emergency 911 last week and it saved this person's life, or it helped me make this meeting,' and will put it on the scale for productivity and everything and realize, 'Okay, these are only claims over here, and this is what the cellular phone actually does for me.'"

Linda Wertheimer
All Things Considered
WETA-FM Radio/NPR Network;
Paul Rissel, member station KPLU;
Rhonda Wickham, Cellular Business Editor
February 2, 1993

"Woven into the legal, scientific, ethical and business tapestry cloaking the cellular-phone

"Donaldson Lufkin & Jenrett analyst Drew Peck described the market's reaction as 'emotional' and said it was incredible 'that one misinformed and misguided individual who blames cellular phones [for] his tumor could have this kind of impact.'"

"Motorola stock due for correction-analysts"
by Thomas Witom
Reuter, January 29, 1993

"However, scientists doing work for organizations that set standards used by the Federal Communications Commission in setting limits on radio wave emissions say the power of cellular phones is way too low to be dangerous.

"'We examined the pertinent biological data available and drew a line and said below that there are no known biological affects,' said Dr. James Lin, professor of bio-engineering at the University of Illinois and a standards author.

"The line they drew was 10 times below the amount of power when any biological impacts were discovered, he said.

* * *

"Dr. Eleanor Adair, another standards author at Yale University, said, 'I spent 19 years doing experiments with microwave fields, and I can say that emissions of cellular telephones do not cause cancer.'

"The Food and Drug Administration, which enforces health safety standards for the FCC, said there [have] been no scientific studies to link low-frequency radiation, such as that from cellular phones, to cancer. The FDA said it has found no reason to issue a health warning."

"Booming Cellular Telephone Industry Copes with Cancer Scare"
by Barbara Grady
Reuter, January 25, 1993

"Victor Levin, one of the country's most respected brain cancer experts, has another word for Reynard's theories: 'Poppycock.'

"No study has ever linked the phones to any kind of health problem, much less cancer. The government has a safety guideline of sorts, and cellular phones fall well within it.

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"Further cell phone radiation research would simply waste good money, says Dr. Victor Levin. That's because electromagnetic waves simply don't cause cancer.